BLUE ROCK
ENVIRONMENTAL, INC.

Ms. Kasey Ashley
NCRWQCB
5550 Skylane Blvd, Ste A
Santa Rosa, CA 95403

June 15, 2006

Workplan for Soil Stockpile Sampling (McKinelyville Site)
Beaver Lumber Company (former)
1220 Fifth Street
Arcata, California
Case No. 1NHU001

Dear Ms. Ashley,

This workplan is submitted by Blue Rock Environmental, Inc. (Blue Rock), on behalf of Mr. Bradford C. Floyd, in response to the North Coast Regional Water Quality Control Board (NCRWQCB) letter dated December 23, 2005. In that letter, the NCRWQCB recommended conducting soil leachability testing on the stockpiled soil and required sampling of the native soil below the stockpile.

A detailed background of site conditions can be found in Blue Rock's *Closure Summary* dated April 7, 2006.

Workplan for Soil Stockpile TPHmo Leachability Testing

Purpose
The goal of the work proposed below is to evaluate soil disposal options for the stockpiled soil generated from the Beaver Lumber site with motor oil contaminants. Blue Rock proposes to achieve this goal by sampling 10 percent of the locations sampled on Figure 1.

Soil Sampling Activities
Discrete soil samples will be collected at a depth of approximately 3 to 4 feet into the stockpiled soil using a clean shovel at nine locations shown in Figure 2.

Soil samples will then be collected in appropriate containers, labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

A California DHS-certified laboratory will analyze the soil samples for the following:

- TPHmo using EPA Method 8015M (with silica-gel clean-up)
- California Waste Extraction Test (WET/DI) (neutral pH)
- TPHmo using EPA Method 8015M (with silica-gel clean-up) on the WET/DI extract

535 Third St., Suite 100 * Eureka, CA 95501 * Office (707) 441-1934 * Fax (707) 441-1949

Between sampling locations, excavating tools and sampling devices will be cleaned in an Alconox® wash followed by double rinse in clean tap water to prevent cross-contamination. Rinseate will be stored in labeled 55-gallon drums on-site pending removal and disposal.

Proposed Schedule

Blue Rock desires to complete the proposed scope of work in early July 2006. The report summarizing the results will follow 15 days after field activities.

Proposed Reporting

Blue Rock will prepare a brief letter report summarizing the sampling results. The report will be supported by data presented in tabular and graphical form. The report will provide recommendations, as appropriate, and it will be prepared under the supervision of, and sealed by, a California Professional Geologist at Blue Rock.

Workplan for Soil Interface Testing

Purpose

The goal of the work proposed below is to determine if motor oil contaminants have leached out of the soil stockpile generated from the Beaver Lumber site into the surface soil below the stockpiles. Blue Rock proposes to achieve this goal by sampling 10 percent of the locations sampled on Figure 1.

Soil Sampling Activities

Discrete soil samples will be collected from soil underlying the stockpiles. These samples will be collected at a depth of approximately 1 foot below the contact of the overlying soil stockpile and native soil surface using a clean shovel at nine locations shown in Figure 2.

Soil samples will then be collected in appropriate containers, labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

A California DHS-certified laboratory will analyze the soil samples for the following:

- TPHmo using EPA Method 8015M (with silica-gel clean-up)
- California Waste Extraction Test (WET/DI) (neutral pH)
- TPHmo using EPA Method 8015M (with silica-gel clean-up) on the WET/DI extract

Between sampling locations, excavating tools and sampling devices will be cleaned in an Alconox® wash followed by double rinse in clean tap water to prevent cross-contamination. Rinseate will be stored in labeled 55-gallon drums on-site pending removal and disposal.

Proposed Schedule

Blue Rock will complete the proposed scope of work upon completion of soil stockpile disposal activities. It is anticipated that this activities will be completed by August 2006. The report summarizing the results will follow 15 days after field activities.

Proposed Reporting

Blue Rock will prepare a brief letter report summarizing the soil interface sampling results. The report will be supported by data presented in tabular and graphical form. The report will provide recommendations, as appropriate, and it will be prepared under the supervision of, and sealed by, a California Professional Geologist at Blue Rock.

Certification

This workplan was prepared under the supervision of a California Professional Geologist at Blue Rock. All statements, conclusions, and recommendations are based upon published results from past consultants, field observations by Blue Rock, and analyses performed by a state-certified laboratory as they relate to the time, location, and depth of points sampled by Blue Rock. Interpretation of data, including spatial distribution and temporal trends, are based on commonly used geologic and scientific principles. It is possible that interpretations, conclusions, and recommendations presented in this report may change, as additional data become available and/or regulations change.

Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

The service performed by Blue Rock has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

If you have any questions regarding this project, please contact us at (707) 441-1934.

Sincerely,
Blue Rock Environmental, Inc.

Prepared by:

Scott Ferriman
Project Scientist

Reviewed by:

Brian Gwinn, PG
Principal Geologist

Attachments:

Table 1: Soil Stockpile Analytical Results
Table 2: Soil Stockpile Analytical Results (Metals)

Figure 1: TPHmo Distribution Map
Figure 2: Proposed Soil Sample Location Map

Distribution:

Mr. Bradford C. Floyd
819 Seventh Street
Eureka, CA 95501

Table 1
SOIL STOCKPILE ANALYTICAL RESULTS
Former Beaver Lumber Company
1220 Fifth St., Arcata, California
Blue Rock Project No. NC-1

Sample ID	Sample Description	Sample Date	O and G (mg/kg)	TPHmo (mg/kg)	TPHmo* (mg/kg)	TPHd (mg/kg)	TPHd* (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	PCP (mg/kg)	TCP (mg/kg)
1	sand, gravel, silty clay	9/22/98	--	--	--	<1	--	--	--	--	--	--	--	--	--
2	sand, gravel, silty clay	9/22/98	--	--	--	3.2	--	--	--	--	--	--	--	--	--
3	sand, gravel, silty clay	9/22/98	180	--	--	5.5	--	--	--	--	--	--	--	<1	<1
4	sand, gravel, silty clay	9/22/98	--	--	--	3.7	--	--	--	--	--	--	--	--	--
5	sand, gravel, silty clay	10/13/98	--	63	47	6.7	4.7	<1	<0.005	0.012	<0.005	<0.01	<0.05	<1	<1
6	sand, gravel, silty clay	10/13/98	--	110	71	16	12	<1	<0.005	0.025	<0.005	<0.01	<0.05	--	--
7	sand,gravel,clay, woodwaste	10/13/98	--	710	600	27	26	<1	<0.005	0.02	<0.005	<0.01	<0.05	<1	<1
8	sand, gravel, silty clay	10/13/98	--	--	--	--	--	--	--	--	--	--	--	--	--
9	sand, gravel, silty clay	10/13/98	--	53	50	5.2	4.6	<1	<0.005	0.0087	<0.005	<0.01	<0.05	<1	<1
10	silty clay	10/13/98	--	14	13	<1	<1	<1	<0.005	<0.005	<0.005	<0.01	<0.05	<1	<1
#1	sand, gravel, silty clay	8/21/00	--	100	--	5.7	--	--	--	--	--	--	--	--	--
#2	sand, gravel, silty clay	8/21/00	--	390	--	21	--	--	--	--	--	--	--	--	--
S1-1	sand, gravel, silty clay	11/11/05	--	--	100	--	52	--	--	--	--	--	--	--	--
S1-2	sand, gravel, silty clay	11/11/05	--	--	170	--	43	--	--	--	--	--	--	--	--
S1-3	sand, gravel, silty clay	11/11/05	--	--	180	--	84	--	--	--	--	--	--	--	--
S1-4	sand, gravel, silty clay	11/11/05	--	--	150	--	64	--	--	--	--	--	--	--	--
S1-5	sand, gravel, silty clay	11/11/05	--	--	88	--	52	--	--	--	--	--	--	--	--
S1-6	sand, gravel, silty clay	11/11/05	--	--	180	--	72	--	--	--	--	--	--	--	--
S1-7	sand, gravel, silty clay	11/11/05	--	--	130	--	60	--	--	--	--	--	--	--	--
S1-8	sand, gravel, silty clay	11/11/05	--	--	260	--	67	--	--	--	--	--	--	--	--
S1-9	sand, gravel, silty clay	11/11/05	--	--	250	--	110	--	--	--	--	--	--	--	--
S1-10	sand, gravel, silty clay	11/11/05	--	--	300	--	140	--	--	--	--	--	--	--	<1
S1-11	sand, gravel, silty clay	11/11/05	--	--	73	--	41	--	--	--	--	--	--	--	--
S1-12	sand, gravel, silty clay	11/11/05	--	--	84	--	46	--	--	--	--	--	--	--	--
S1-13	sand, gravel, silty clay	11/11/05	--	--	120	--	55	--	--	--	--	--	--	--	--
S1-14	sand, gravel, silty clay	11/11/05	--	--	100	--	30	--	--	--	--	--	--	--	--
S1-15	sand, gravel, silty clay	11/11/05	--	--	200	--	47	--	--	--	--	--	--	--	<1
S1-16	sand, gravel, silty clay	11/11/05	--	--	160	--	68	--	--	--	--	--	--	--	--
S1-17	sand, gravel, silty clay	11/11/05	--	--	150	--	64	--	--	--	--	--	--	--	--
S1-18	sand, gravel, silty clay	11/11/05	--	--	160	--	38	--	--	--	--	--	--	--	--
S1-19	sand, gravel, silty clay	11/11/05	--	--	120	--	33	--	--	--	--	--	--	--	--
S1-20	sand, gravel, silty clay	11/11/05	--	--	170	--	73	--	--	--	--	--	--	--	--
S1-21	sand, gravel, silty clay	11/11/05	--	--	210	--	54	--	--	--	--	--	--	--	<1
S1-22	sand, gravel, silty clay	11/11/05	--	--	92	--	28	--	--	--	--	--	--	--	--
S1-23	sand, gravel, silty clay	11/11/05	--	--	74	--	38	--	--	--	--	--	--	--	--
S1-24	sand, gravel, silty clay	11/11/05	--	--	310	--	63	--	--	--	--	--	--	--	--
S1-25	sand, gravel, silty clay	11/11/05	--	--	120	--	51	--	--	--	--	--	--	--	--

Table 1
SOIL STOCKPILE ANALYTICAL RESULTS
Former Beaver Lumber Company
1220 Fifth St., Arcata, California
Blue Rock Project No. NC-1

Sample ID	Sample Description	Sample Date	O and G (mg/kg)	TPHmo (mg/kg)	TPHmo* (mg/kg)	TPHd (mg/kg)	TPHd* (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	PCP (mg/kg)	TCP (mg/kg)
S1-26	sand, gravel, silty clay	11/11/05	--	--	100	--	50	--	--	--	--	--	--	--	--
S1-27	sand, gravel, silty clay	11/11/05	--	--	170	--	44	--	--	--	--	--	--	--	--
S1-28	sand, gravel, silty clay	11/11/05	--	--	130	--	57	--	--	--	--	--	--	--	--
S1-29	sand, gravel, silty clay	11/11/05	--	--	90	--	63	--	--	--	--	--	--	--	--
S1-30	sand, gravel, silty clay	11/11/05	--	--	220	--	51	--	--	--	--	--	--	--	--
S1-31	sand, gravel, silty clay	11/11/05	--	--	140	--	60	--	--	--	--	--	--	--	--
S1-32	sand, gravel, silty clay	11/11/05	--	--	120	--	34	--	--	--	--	--	--	--	--
S1-33	sand, gravel, silty clay	11/11/05	--	--	240	--	100	--	--	--	--	--	--	--	--
S1-34	sand, gravel, silty clay	11/11/05	--	--	130	--	60	--	--	--	--	--	--	--	<1
S1-35	sand, gravel, silty clay	11/11/05	--	--	240	--	97	--	--	--	--	--	--	--	--
S1-36	sand, gravel, silty clay	11/11/05	--	--	150	--	38	--	--	--	--	--	--	--	--
S1-37	sand, gravel, silty clay	11/11/05	--	--	130	--	71	--	--	--	--	--	--	--	--
S1-38	sand, gravel, silty clay	11/11/05	--	--	320	--	140	--	--	--	--	--	--	--	--
S1-39	sand, gravel, silty clay	11/11/05	--	--	110	--	58	--	--	--	--	--	--	--	<1
S1-40	sand, gravel, silty clay	11/11/05	--	--	89	--	42	--	--	--	--	--	--	--	--
S1-41	sand, gravel, silty clay	11/11/05	--	--	290	--	110	--	--	--	--	--	--	--	--
S1-42	sand, gravel, silty clay	11/11/05	--	--	500	--	100	--	--	--	--	--	--	--	--
S1-43	sand, gravel, silty clay	11/11/05	--	--	270	--	53	--	--	--	--	--	--	--	--
S1-44	sand, gravel, silty clay	11/11/05	--	--	200	--	76	--	--	--	--	--	--	--	--
S1-45	sand, gravel, silty clay	11/11/05	--	--	330	--	96	--	--	--	--	--	--	--	--
S1-46	sand, gravel, silty clay	11/11/05	--	--	240	--	72	--	--	--	--	--	--	--	--
S1-47	sand, gravel, silty clay	11/11/05	--	--	320	--	98	--	--	--	--	--	--	--	--
S1-48	sand, gravel, silty clay	11/11/05	--	--	170	--	44	--	--	--	--	--	--	--	--
S2-1	sand, gravel, silty clay	11/11/05	--	--	460	--	180	--	--	--	--	--	--	--	--
S2-2	sand, gravel, silty clay	11/11/05	--	--	450	--	180	--	--	--	--	--	--	--	--
S2-3	sand, gravel, silty clay	11/11/05	--	--	730	--	310	--	--	--	--	--	--	--	--
S2-4	sand, gravel, silty clay	11/11/05	--	--	760	--	280	--	--	--	--	--	--	--	--
S2-5	sand, gravel, silty clay	11/11/05	--	--	790	--	290	--	--	--	--	--	--	--	--
S2-6	sand, gravel, silty clay	11/11/05	--	--	630	--	260	--	--	--	--	--	--	--	--
S2-7	sand, gravel, silty clay	11/11/05	--	--	440	--	170	--	--	--	--	--	--	--	--
S2-8	sand, gravel, silty clay	11/11/05	--	--	670	--	280	--	--	--	--	--	--	--	<1
S2-9	sand, gravel, silty clay	11/11/05	--	--	330	--	140	--	--	--	--	--	--	--	--
S2-10	sand, gravel, silty clay	11/11/05	--	--	540	--	210	--	--	--	--	--	--	--	--
S2-11	sand, gravel, silty clay	11/11/05	--	--	600	--	240	--	--	--	--	--	--	--	--
S2-12	sand, gravel, silty clay	11/11/05	--	--	510	--	98	--	--	--	--	--	--	--	--
S2-13	sand, gravel, silty clay	11/11/05	--	--	680	--	150	--	--	--	--	--	--	--	--
S2-14	sand, gravel, silty clay	11/11/05	--	--	880	--	260	--	--	--	--	--	--	--	--
S2-15	sand, gravel, silty clay	11/11/05	--	--	900	--	190	--	--	--	--	--	--	--	--
S2-16	sand, gravel, silty clay	11/11/05	--	--	600	--	240	--	--	--	--	--	--	--	--

Table 1
SOIL STOCKPILE ANALYTICAL RESULTS
Former Beaver Lumber Company
1220 Fifth St., Arcata, California
Blue Rock Project No. NC-1

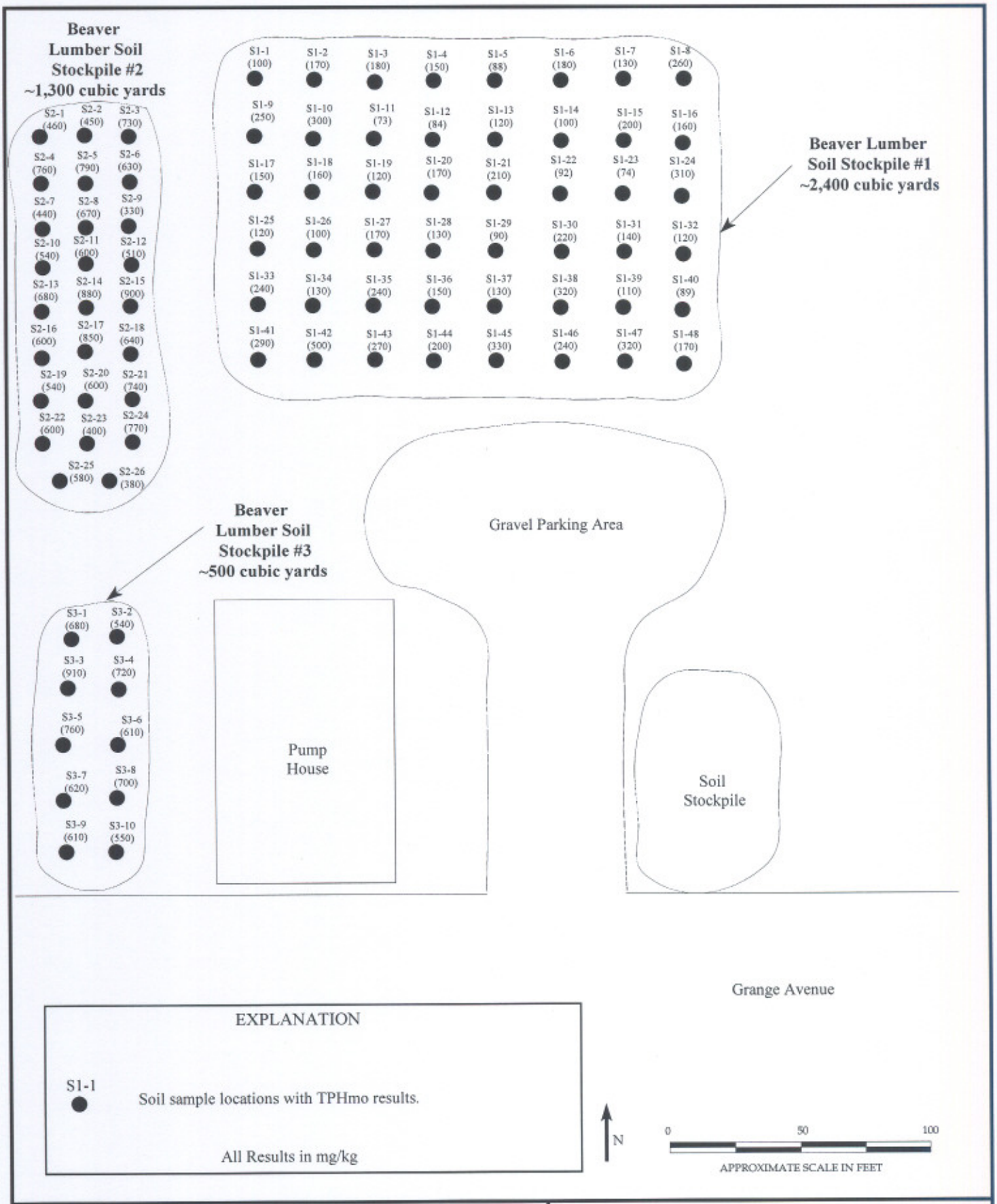
Sample ID	Sample Description	Sample Date	O and G (mg/kg)	TPHmo (mg/kg)	TPHmo* (mg/kg)	TPHd (mg/kg)	TPHd* (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	PCP (mg/kg)	TCP (mg/kg)
S2-17	sand, gravel, silty clay	11/11/05	--	--	850	--	290	--	--	--	--	--	--	--	--
S2-18	sand, gravel, silty clay	11/11/05	--	--	640	--	250	--	--	--	--	--	--	--	--
S2-19	sand, gravel, silty clay	11/11/05	--	--	540	--	210	--	--	--	--	--	--	--	--
S2-20	sand, gravel, silty clay	11/11/05	--	--	600	--	250	--	--	--	--	--	--	--	<1
S2-21	sand, gravel, silty clay	11/11/05	--	--	740	--	140	--	--	--	--	--	--	--	--
S2-22	sand, gravel, silty clay	11/11/05	--	--	600	--	200	--	--	--	--	--	--	--	--
S2-23	sand, gravel, silty clay	11/11/05	--	--	400	--	160	--	--	--	--	--	--	--	--
S2-24	sand, gravel, silty clay	11/11/05	--	--	770	--	300	--	--	--	--	--	--	--	--
S2-25	sand, gravel, silty clay	11/11/05	--	--	580	--	210	--	--	--	--	--	--	--	--
S2-26	sand, gravel, silty clay	11/11/05	--	--	380	--	200	--	--	--	--	--	--	--	--
S3-1	sand, gravel, silty clay	11/11/05	--	--	680	--	250	--	--	--	--	--	--	--	--
S3-2	sand, gravel, silty clay	11/11/05	--	--	540	--	190	--	--	--	--	--	--	--	--
S3-3	sand, gravel, silty clay	11/11/05	--	--	910	--	330	--	--	--	--	--	--	--	--
S3-4	sand, gravel, silty clay	11/11/05	--	--	720	--	270	--	--	--	--	--	--	--	--
S3-5	sand, gravel, silty clay	11/11/05	--	--	760	--	290	--	--	--	--	--	--	--	--
S3-6	sand, gravel, silty clay	11/11/05	--	--	610	--	220	--	--	--	--	--	--	--	<1
S3-7	sand, gravel, silty clay	11/11/05	--	--	620	--	220	--	--	--	--	--	--	--	--
S3-8	sand, gravel, silty clay	11/11/05	--	--	700	--	240	--	--	--	--	--	--	--	--
S3-9	sand, gravel, silty clay	11/11/05	--	--	610	--	200	--	--	--	--	--	--	--	--
S3-10	sand, gravel, silty clay	11/11/05	--	--	550	--	210	--	--	--	--	--	--	--	--

Notes
mg/kg = milligrams per kilogram
<###: Not detected above the method detection limit as shown
O and G: Total hydrocarbon oil and grease by Standard Method 5520 EF
TPHmo: Total petroleum hydrocarbons as motor oil by EPA Method 3550/8015M
TPHmo*: Total petroleum hydrocarbons as motor oil with silica gel cleanup by EPA Method 3550/8015M
TPHd: Total petroleum hydrocarbons as diesel by EPA Method 3550/8015M
TPHd*: Total petroleum hydrocarbons as diesel with silica gel cleanup by EPA Method 3550/8015M
TPHg: Total petroleum hydrocarbons as gasoline by EPA Method 5030/8015M
BTEX: Benzene, toluene, ethylbenzene, total xylenes by EPA Method 8020
MTBE: Methyl tertiary butyl ether by EPA 8020
PCP: Pentachlorophenol by Canadian pulp method
TCP: Tetrachlorophenol by Canadian Pulp Method
"--" Not analyzed, available or applicable

Table 2
SOIL STOCKPILE ANALYTICAL RESULTS (METALS)
Former Beaver Lumber Company
1220 Fifth St., Arcata, California
Blue Rock Project No. NC-1

Sample ID	Sample Description	Sample Date	Sb (mg/kg)	As (mg/kg)	Ba (mg/kg)	Be (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Co (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Ag (mg/kg)	Tl (mg/kg)	V (mg/kg)	Zn (mg/kg)
1	sand, gravel, silty clay	9/22/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	sand, gravel, silty clay	9/22/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	sand, gravel, silty clay	9/22/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	sand, gravel, silty clay	9/22/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	sand, gravel, silty clay	10/13/98	ND	ND	**140**	ND	ND	**62**	**11**	**24**	ND	ND	ND	**66**	ND	ND	ND	**39**	**63**
6	sand, gravel, silty clay	10/13/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	sand,gravel,clay, woodwaste	10/13/98	ND	ND	**170**	ND	ND	**42**	ND	**25**	ND	ND	ND	**50**	ND	ND	ND	**35**	**54**
8	sand, gravel, silty clay	10/13/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	sand, gravel, silty clay	10/13/98	ND	ND	**120**	ND	ND	**57**	**11**	**22**	ND	ND	ND	**69**	ND	ND	ND	**37**	**65**
10	silty clay	10/13/98	ND	ND	**170**	ND	ND	**79**	**14**	**27**	ND	ND	ND	**92**	ND	ND	ND	**42**	**71**

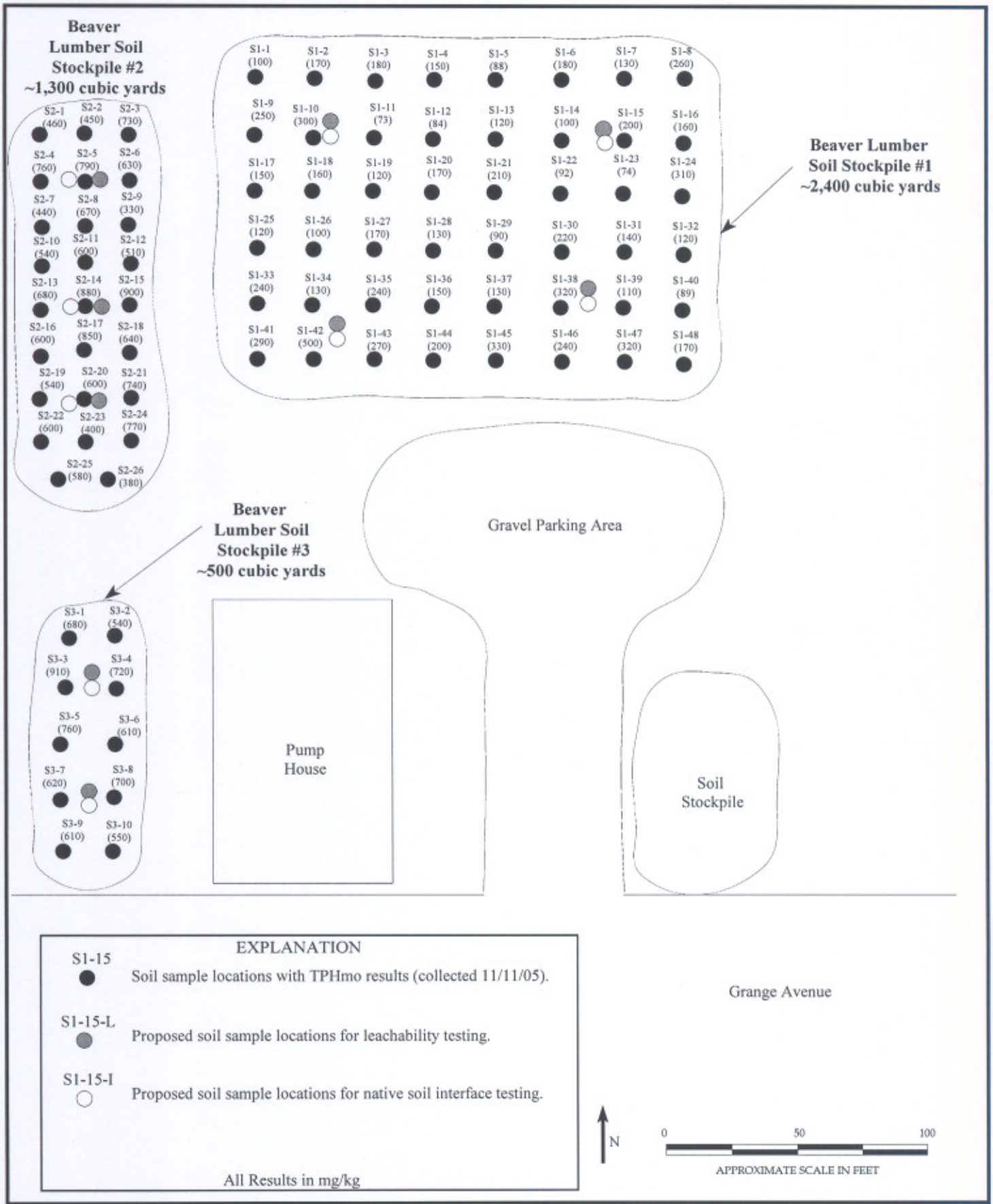
Notes
mg/kg = milligrams per kilogram
ND: Not detected above the method detection limit
Sb: Antimony by EPA Method 7000 series
As: Arsenic by EPA Method 7000 series
Ba: Barium by EPA Method 7000 series
Be: Beryllium by EPA Method 7000 series
Cd: Cadmium by EPA Method 7000 series
Cr: Total Chromium by EPA Method 7000 series
Co: Cobalt by EPA Method 7000 series
Cu: Copper by EPA Method 7000 series
Pb: Lead by EPA Method 7000 series
Hg: Mercury by EPA Method 7000 series
Mo: Molybdenum by EPA Method 7000 series
Ni: Nickel by EPA Method 7000 series
Se: Selenium by EPA Method 7000 series
Ag: Silver by EPA Method 7000 series
Tl: Thallium by EPA Method 7000 series
V: Vanadium by EPA Method 7000 series
Zn: Zinc by EPA Method 7000 series



TPHmo Distribution Map
Soil Stockpiles from Beaver Lumber Site
Grange Avenue
McKinleyville, California

BLUE ROCK ENVIRONMENTAL, INC.

Project No.	Figure Date	Figure
NC-1	6/06	1



Proposed Soil Sample Location Map
Soil Stockpiles from Beaver Lumber Site
Grange Avenue
McKinleyville, California

BLUE ROCK ENVIRONMENTAL, INC.

Project No.	Figure Date	Figure
NC-1	6/06	2